

1     **WHAT IS CLAIMED IS:**

2           1. A security system for a building, the system comprising:

3               at least one sensor installed inside the building to monitor environment  
4               data, wherein a memory is built inside the at least one sensor to store a default  
5               value, and the default value is applied to compare to subsequent environment  
6               data recorded by the at least one sensor;

7               at least one image capture device installed at a particular place near the  
8               at least one sensor to capture image data where said at least one sensor monitors  
9               the particular place;

10              a control unit communicating with said at least one sensor and said at  
11               least one image capture device, wherein the control unit receives signals output  
12               from the at least one sensor and controls the at least one image capture device to  
13               capture image data;

14              a communication interface, which serves as an interface between the  
15               control unit and the Internet or a mobile telecommunication network, whereby  
16               the captured image data is transmitted to a cell phone owned by a responsible  
17               person of the building; wherein the control unit is able to dial an emergency  
18               telephone number through the Internet to a police authority or a security service  
19               firm; and

20              an alarming device connected to the control unit to generate alarming  
21               signals.

22              2. The security system as claimed in claim 1, wherein said at least one  
23               sensor is an infrared sensor.

24              3. The security system as claimed in claim 1, wherein said at least one

1 sensor is an ultrasonic sensor.

2 4. The security system as claimed in claim 1, wherein said at least one  
3 sensor is a CCD camera.

4 5. The security system as claimed in claim 1, wherein said at least one  
5 sensor is a CMOS camera.

6 6. The security system as claimed in claim 1, wherein said at least one  
7 image capture device is a CCD camera.

8 7. The security system as claimed in claim 1, wherein said at least one  
9 image capture device is a CMOS camera.

10 8. The security system as claimed in claim 1, wherein the at least one  
11 sensor and the at least one image capture device are connected to the control unit  
12 via power lines, and multiple power line carriers are respectively connected to  
13 the at least one sensor, the at least one image capture device and the control unit;  
14 wherein transmitting data over the power lines are modulated or  
15 demodulated by the power line carriers.

16 9. The security system as claimed in claim 2, wherein the at least one  
17 sensor and the at least one image capture device are connected to the control unit  
18 via power lines, and multiple power line carriers are respectively connected to  
19 the at least one sensor, the at least one image capture device and the control unit;  
20 wherein transmitting data over the power lines are modulated or  
21 demodulated by the power line carriers.

22 10. The security system as claimed in claim 3, wherein the at least one  
23 sensor and the at least one image capture device are connected to the control unit  
24 via power lines, and multiple power line carriers are respectively connected to

1 the at least one sensor, the at least one image capture device and the control unit;  
2 wherein transmitting data over the power lines are modulated or  
3 demodulated by the power line carriers.

4 11. The security system as claimed in claim 4, wherein the at least one  
5 sensor and the at least one image capture device are connected to the control unit  
6 via power lines, and multiple power line carriers are respectively connected to  
7 the at least one sensor, the at least one image capture device and the control unit;  
8 wherein transmitting data over the power lines are modulated or  
9 demodulated by the power line carriers.

10 12. The security system as claimed in claim 5, wherein the at least one  
11 sensor and the at least one image capture device are connected to the control unit  
12 via power lines, and multiple power line carriers are respectively connected to  
13 the at least one sensor, the at least one image capture device and the control unit;  
14 wherein transmitting data over the power lines are modulated or  
15 demodulated by the power line carriers.

16 13. The security system as claimed in claim 6, wherein the at least one  
17 sensor and the at least one image capture device are connected to the control unit  
18 via power lines, and multiple power line carriers are respectively connected to  
19 the at least one sensor, the at least one image capture device and the control unit;  
20 wherein transmitting data over the power lines are modulated or  
21 demodulated by the power line carriers.

22 14. The security system as claimed in claim 7, wherein the at least one  
23 sensor and the at least one image capture device are connected to the control unit  
24 via power lines, and multiple power line carriers are respectively connected to

1 the at least one sensor, the at least one image capture device and the control unit;  
2 wherein transmitting data over the power lines are modulated or  
3 demodulated by the power line carriers.

4 15. The security system as claimed in claim 1, wherein the at least one  
5 sensor and the at least one image capture device communicate to the control unit  
6 wirelessly;

7 wherein multiple radio signal transceivers are respectively connected to  
8 the at least one sensor, the at least one image capture device and the control unit.

9 16. The security system as claimed in claim 2, wherein the at least one  
10 sensor and the at least one image capture device communicate to the control unit  
11 wirelessly;

12 wherein multiple radio signal transceivers are respectively connected to  
13 the at least one sensor, the at least one image capture device and the control unit.

14 17. The security system as claimed in claim 3, wherein the at least one  
15 sensor and the at least one image capture device communicate to the control unit  
16 wirelessly;

17 wherein multiple radio signal transceivers are respectively connected to  
18 the at least one sensor, the at least one image capture device and the control unit.

19 18. The security system as claimed in claim 4, wherein the at least one  
20 sensor and the at least one image capture device communicate to the control unit  
21 wirelessly;

22 wherein multiple radio signal transceivers are respectively connected to  
23 the at least one sensor, the at least one image capture device and the control unit.

24 19. The security system as claimed in claim 5, wherein the at least one

1 sensor and the at least one image capture device communicate to the control unit  
2 wirelessly;

3 wherein multiple radio signal transceivers are respectively connected to  
4 the at least one sensor, the at least one image capture device and the control unit.

5 20. The security system as claimed in claim 6, wherein the at least one  
6 sensor and the at least one image capture device communicate to the control unit  
7 wirelessly;

8 wherein multiple radio signal transceivers are respectively connected to  
9 the at least one sensor, the at least one image capture device and the control unit.